

CLAIMS

1. A culture medium for preparation of feeder cells for embryonic stem cells, comprising serum albumin, insulin and a basal medium, wherein the amount of said serum albumin is from 2 g/L to 50 g/L, the amount of said insulin is from 1 mg/L to 100 mg/L, and said basal medium is at least one kind selected from MEM, α -MEM, DMEM, IMDM, Ham F10, Ham F12, Medium 199, RPMI 1640, RITC 80-7, MCDB 104, MCDB 105, MCDB 153, MCDB 201 and MCDB 202.

2. The culture medium according to claim 1 further comprising a cell adhesion factor.

3. The culture medium according to claim 2, wherein the cell adhesion factor is at least one kind selected from collagen, gelatin, fibronectin, vitronectin, laminin, polylysine, polyornithine and polyethyleneimine.

4. The culture medium according to claim 1, 2 or 3 further comprising a cell growth factor.

5. The culture medium according to claim 4, wherein the cell growth factor is at least one kind selected from fibroblast growth factor and epithelial cell growth factor.

6. A method for preparation of feeder cells for embryonic

stem cells comprising the steps of:

culture and proliferation a cell population comprising at least one kind of cells selected from fetal skin fibroblasts, fetal myofibroblasts, fetal lung fibroblasts, fetal epithelial cells, fetal endothelial cells, adult skin fibroblasts, adult lung fibroblasts, adult epithelial cells and adult endothelial cells in the culture medium for preparation of feeder cells for embryonic stem cells according to any one of claims 1 through 5, and

inactivation of proliferation of said cultured and proliferated cell population by mitomycin C or irradiation.

7. The preparation method according to claim 6, wherein said culture and proliferation step is conducted in a culture vessel coated with a cell adhesion factor.

8. The preparation method according to claim 7, wherein the cell adhesion factor is at least one kind selected from collagen, gelatin, fibronectin, vitronectin, laminin, polylysine, polyornithine and polyethyleneimine.

9. The preparation method according to claim 6, 7 or 8, wherein in said culture and proliferation step, the cultured cells are allowed to undergo cell division twenty or more times on average.

10. Feeder cells for embryonic stem cells obtained by the preparation method according to any one of claims 6 through 9.